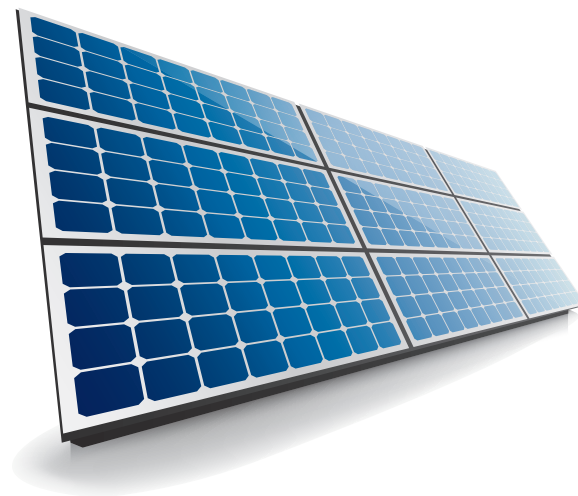




FROG PUMP INDUSTRY

Add: Lianfeng Luoyu Industrial Zone, Huangyan, Taizhou City, Zhejiang, China

Email: sales@frogpump.com Tel: 0086-576-84868265 0086-576-84868258

 <https://www.facebook.com/frogpumps/>

 <http://www.frogpump.com>

SOLAR SUBMERSIBLE PUMPS

SINCE 1988

FROG PUMP

CHINA'S NO.1 BRAND OF DEEP WELL PUMPS

ISO9001:2015   



ABOUT FROG

HISTORY

Focus on deep well pump for 35 years. Now FROG becomes China's **No.1** brand of deep well pump.

SCALE

Covers working area of **80000** m², more than 800 employees.

TECHNOLOGIES

In China firstly invented ceramic anti - sand technology. In China firstly invented wide voltage technology. In China created the world record of the highest delivery head of 4-inch deep well pump.

CERTIFICATION

ISO9001, ISO14001, GB / T28001 management system certification; CE, TUV, SON, GS quality certification.

GOAL

To be the expert and leader of deep well pump in the world.

SALES

Keeps **No.1** sales volume in domestic market for 10 years continuously. Export to more than 80 countries. FROG trademark is registered in over 110 countries.

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DC controller

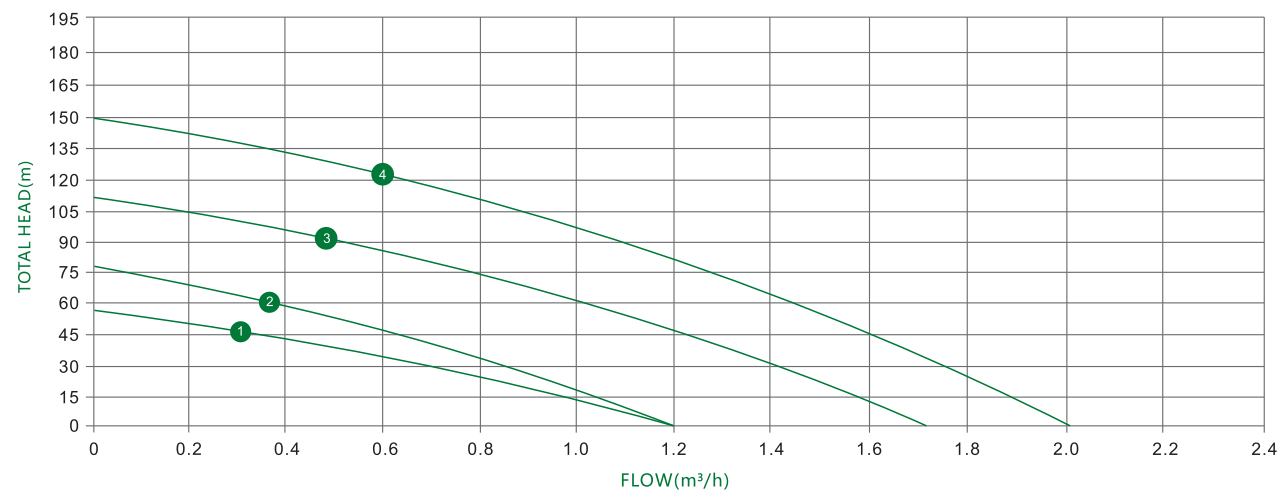
ADVANTAGE FOR SOLAR WATER PUMP

- 1. With high efficiency permanent magnetic motor, efficiency improved 15%-30%
- 2. Environmental protection, clean energy, can be powered by both solar panel and battery
- 3. Over-load protection, under-load protection, lock-rotor protection, thermal protection
- 4. With MPPT function
- 5. Much longer life than the normal AC water pump.

APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

PERFORMANCE CURVES



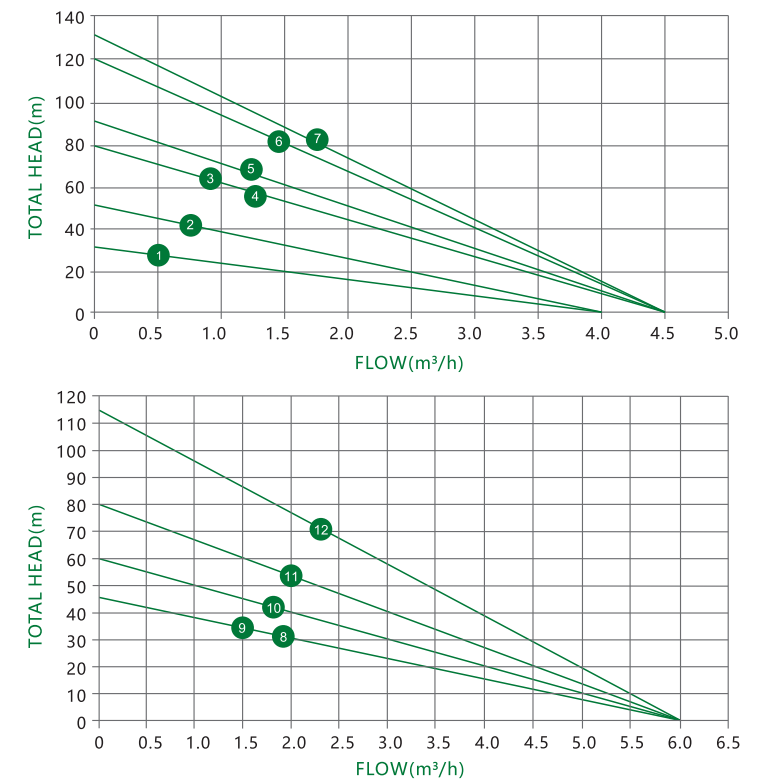
TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
① 3QG1.2/56-24/120	24V	0.12	0.16	1.2m³/h	56m	0.75"	2m	<54V	≥250W
② 3QG1.2/77-36/210	36V	0.21	0.28	1.2m³/h	77m	0.75"	2m	<54V	≥300W
③ 3QG1.7/109-48/500	48V	0.5	0.67	1.7m³/h	109m	0.75"	2m	<110V	≥600W
④ 3QG2.0/150-72/750	72V	0.75	1	2.0m³/h	150m	0.75"	2m	<170V	≥1000W



DC controller

PERFORMANCE CURVES

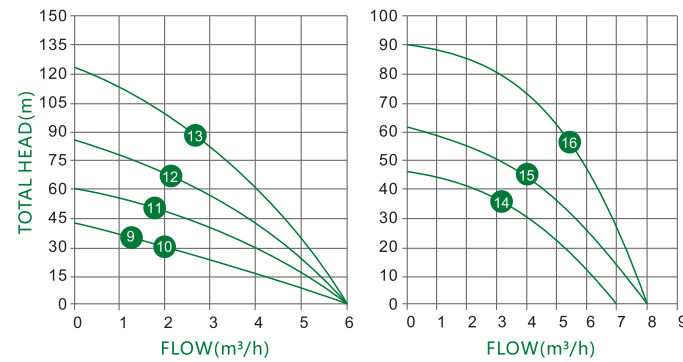
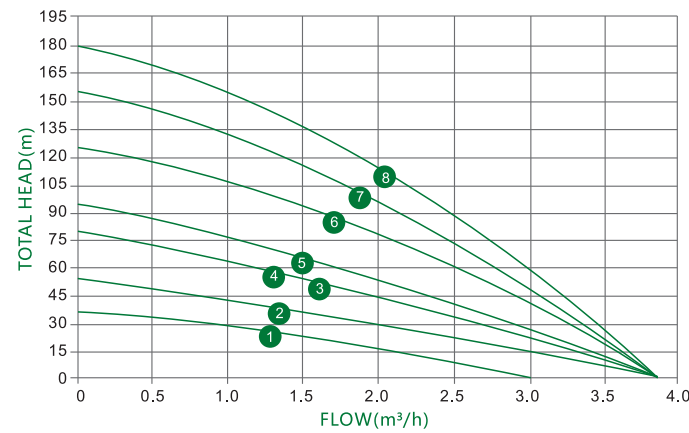


TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
① 3SP4/35-24/300	24V	0.3	0.4	4.0m³/h	35m	1.25"	2m	<54V	≥500W
② 3SP4/50-48/400	48V	0.4	0.55	4.0m³/h	50m	1.25"	2m	<110V	≥600W
③ 3SP4.5/80-48/600	48V	0.6	0.8	4.5m³/h	80m	1.25"	2m	<110V	≥750W
④ 3SP4.5/80-72/600	72V	0.6	0.8	4.5m³/h	80m	1.25"	2m	<170V	≥750W
⑤ 3SP4.5/95-72/750	72V	0.75	1	4.5m³/h	95m	1.25"	2m	<170V	≥1000W
⑥ 3SP4.5/110-110/1100	110V	1.1	1.5	4.5m³/h	110m	1.25"	2m	<210V	≥1500W
⑦ 3SP4.5/130-110/1500	110V	1.5	2	4.5m³/h	130m	1.25"	2m	<210V	≥2000W
⑧ 3SP6/44-48/600	48V	0.6	0.8	6.0m³/h	44m	1.25"	2m	<110V	≥750W
⑨ 3SP6/44-72/600	72V	0.6	0.8	6.0m³/h	44m	1.25"	2m	<170V	≥750W
⑩ 3SP6/60-72/750	72V	0.75	1	6.0m³/h	60m	1.25"	2m	<170V	≥1000W
⑪ 3SP6/85-110/1100	110V	1.1	1.5	6.0m³/h	85m	1.25"	2m	<210V	≥1500W
⑫ 3SP6/115-110/1500	110V	1.5	2	6.0m³/h	115m	1.25"	2m	<210V	≥2000W



PERFORMANCE CURVES



ADVANTAGE FOR SOLAR WATER PUMP

- 1. With high efficiency permanent magnetic motor, efficiency improved 15%-30%
- 2.Environmental protection, clean energy, can be powered by both solar panel and battery
- 3.Over-load protection, under-load protection,lock-rotor protection, thermal protection
- 4.With MPPT function
- 5.Much longer life than the normal AC water pump.

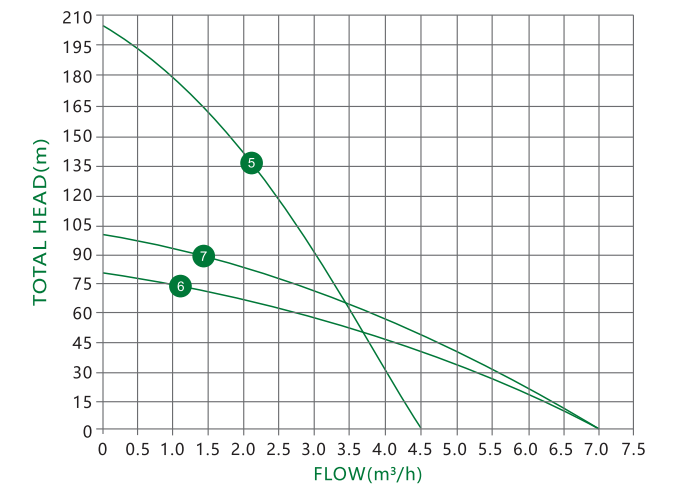
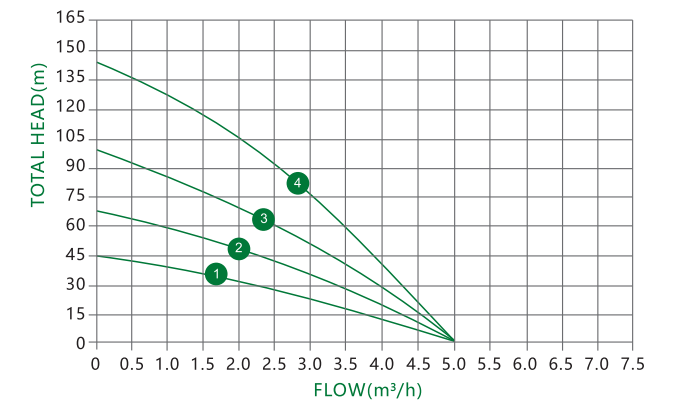
APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
1	24V	0.3	0.4	3.0m³/h	35m	1.25"	2m	<54V	≥500W
2	48V	0.4	0.55	3.8m³/h	55m	1.25"	2m	<110V	≥600W
3	48V	0.6	0.8	3.8m³/h	80m	1.25"	2m	<110V	≥750W
4	72V	0.6	0.8	3.8m³/h	80m	1.25"	2m	<170V	≥750W
5	72V	0.75	1	3.8m³/h	95m	1.25"	2m	<170V	≥1000W
6	110V	1.1	1.5	3.8m³/h	123m	1.25"	2m	<210V	≥1500W
7	110V	1.3	1.75	3.8m³/h	155m	1.25"	2m	<210V	≥1800W
8	110V	1.5	2	3.8m³/h	180m	1.25"	2m	<210V	≥2000W
9	48V	0.6	0.8	6.0m³/h	42m	1.25"	2m	<110V	≥750W
10	72V	0.6	0.8	6.0m³/h	42m	1.25"	2m	<170V	≥750W
11	72V	0.75	1	6.0m³/h	60m	1.25"	2m	<170V	≥1000W
12	110V	1.1	1.5	6.0m³/h	85m	1.25"	2m	<210V	≥1500W
13	110V	1.5	2	6.0m³/h	125m	1.25"	2m	<210V	≥2000W
14	72V	0.75	1	7.0m³/h	46m	1.25"/1.5"	2m	<170V	≥1000W
15	110V	1.1	1.5	8.0m³/h	62m	1.25"/1.5"	2m	<210V	≥1500W
16	110V	1.5	2	8.0m³/h	90m	1.25"/1.5"	2m	<210V	≥2000W

PERFORMANCE CURVES



DC controller

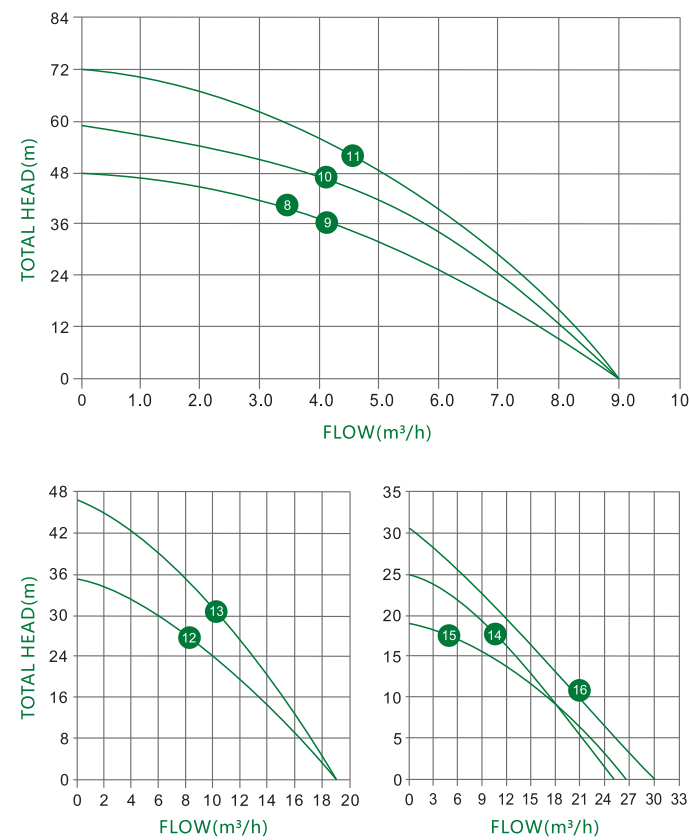
TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
1	48V	0.5	0.67	5.0m³/h	45m	1.25"	2m	<110V	≥600W
2	72V	0.75	1	5.0m³/h	67m	1.25"	2m	<170V	≥1000W
3	110V	1.1	1.5	5.0m³/h	101m	1.25"	2m	<210V	≥1500W
4	110V	1.3	1.75	5.0m³/h	146m	1.25"	2m	<210V	≥1800W
5	110V	1.5	2	4.5m³/h	203m	1.25"	2m	<210V	≥2000W
6	110V	1.3	1.75	7.0m³/h	80m	1.25"	2m	<210V	≥1800W
7	110V	1.5	2	7.0m³/h	100m	1.25"	2m	<210V	≥2000W



DC controller

PERFORMANCE CURVES



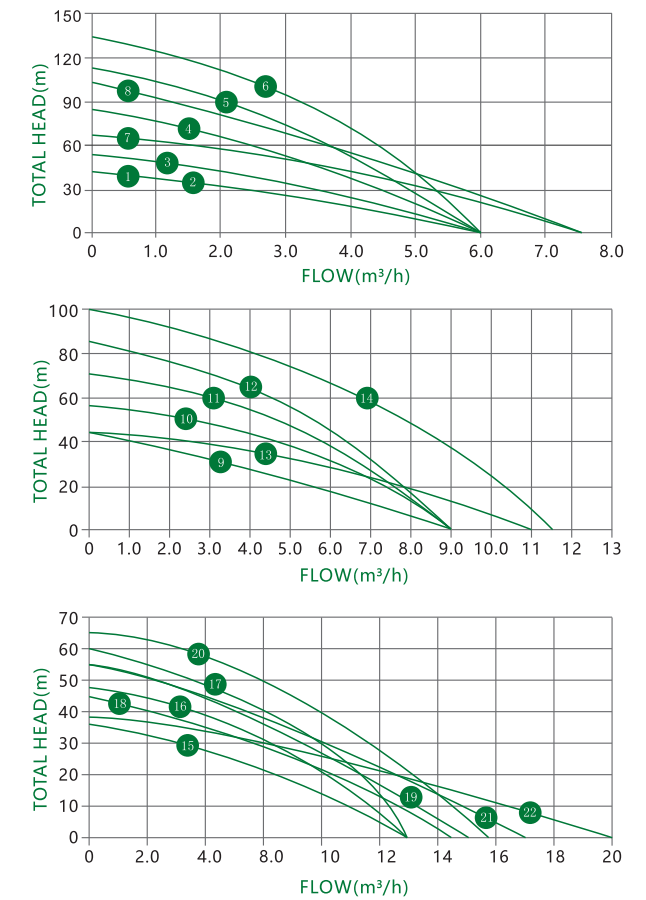
TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
8 4SP9/48-72/750	72V	0.75	1	9.0m³/h	48m	2"	2m	<170V	≥1000W
9 4SP9/48-110/750	110V	0.75	1	9.0m³/h	48m	2"	2m	<210V	≥1000W
10 4SP9/59-110/1300	110V	1.3	1.75	9.0m³/h	59m	2"	2m	<210V	≥1800W
11 4SP9/72-110/1500	110V	1.5	2	9.0m³/h	72m	2"	2m	<210V	≥2000W
12 4SP19/35-110/1300	110V	1.3	1.75	19.0m³/h	35m	2"	2m	<210V	≥1800W
13 4SP19/46-110/1500	110V	1.5	2	19.0m³/h	46m	2"	2m	<210V	≥2000W
14 4SP25/25-110/1500	110V	1.5	2	25.0m³/h	25m	2"	2m	<210V	≥2000W
15 4/6SP26/18-110/1100	110V	1.1	1.5	26.0m³/h	18m	2"	2m	<210V	≥1500W
16 4/6SP30/31-110/1500	110V	1.5	2	30.0m³/h	31m	3"	2m	<210V	≥2000W



DC controller

PERFORMANCE CURVES



TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
1 4SD6/42-48/600	48V	0.6	0.8	6.0m³/h	42m	1.25"	2m	<110V	≥750W
2 4SD6/42-72/600	72V	0.6	0.8	6.0m³/h	42m	1.25"	2m	<170V	≥750W
3 4SD6/56-72/750	72V	0.75	1	6.0m³/h	56m	1.25"	2m	<170V	≥1000W
4 4SD6/112-110/1300	110V	1.1	1.5	6.0m³/h	84m	1.25"	2m	<210V	≥1500W
5 4SD6/135-110/1500	110V	1.3	1.75	6.0m³/h	112m	1.25"	2m	<210V	≥1800W
6 4SD6/175-300/2200	110V	1.5	2	6.0m³/h	135m	1.25"	2m	<210V	≥2000W
7 4SD7.5/65-110/750	110V	0.75	1	7.5m³/h	65m	1.5"	2m	<210V	≥1000W
8 4SD7.5/100-110/1100	110V	1.1	1.5	7.5m³/h	100m	1.5"	2m	<210V	≥1500W
9 4SD9/45-72/750	72V	0.75	1	9.0m³/h	45m	2"	2m	<170V	≥1000W
10 4SD9/58-110/1100	110V	1.1	1.5	9.0m³/h	58m	2"	2m	<210V	≥1500W
11 4SD9/71-110/1300	110V	1.3	1.75	9.0m³/h	71m	2"	2m	<210V	≥1800W
12 4SD9/85-110/1500	110V	1.5	2	9.0m³/h	85m	2"	2m	<210V	≥2000W
13 4SD11/45-72/750	72V	0.75	1	11.0m³/h	45m	2"	2m	<170V	≥1000W
14 4SD11.5/100-110/1500	110V	1.5	2	11.5m³/h	100m	2"	2m	<210V	≥2000W
15 4SD13/36-72/750	72V	0.75	1	13.0m³/h	36m	2"	2m	<170V	≥1000W
16 4SD13/48-110/1100	110V	1.1	1.5	13.0m³/h	48m	2"	2m	<210V	≥1500W
17 4SD13/60-110/1500	110V	1.5	2	13.0m³/h	60m	2"	2m	<210V	≥2000W
18 4SD14.5/45-72/750	72V	0.75	1	14.5m³/h	45m	2"	2m	<170V	≥1000W
19 4SD15/55-110/1100	110V	1.1	1.5	15.0m³/h	55m	2"	2m	<210V	≥1500W
20 4SD15.5/65-110/1500	110V	1.5	2	15.5m³/h	65m	2"	2m	<210V	≥2000W
21 4SD17/48-110/1500	110V	1.5	2	17.0m³/h	48m	2"	2m	<210V	≥2000W
22 4SD20/38-110/1500	110V	1.5	2	20.0m³/h	38m	2"	2m	<210V	≥2000W



DC-HV

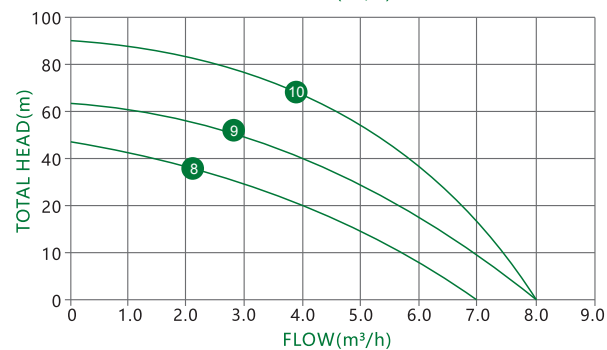
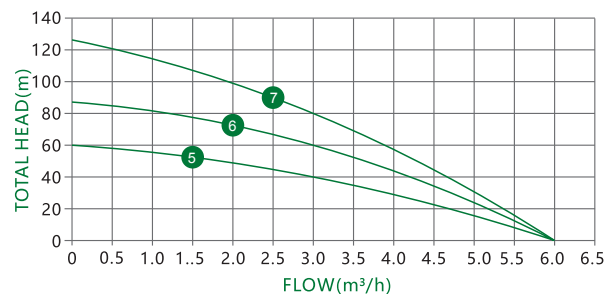
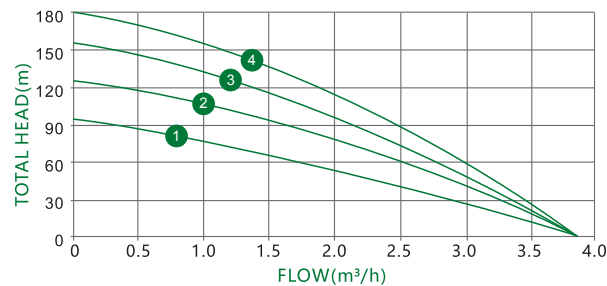
ADVANTAGE FOR SOLAR WATER PUMP

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APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

PERFORMANCE CURVES



TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
① 3SDH3.8/95-110/750	110V	0.75	1	3.8m³/h	95m	1.25"	2m	<430V	≥1000W
② 3SDH3.8/123-150/1100	150V	1.1	1.5	3.8m³/h	123m	1.25"	2m	<430V	≥1500W
③ 3SDH3.8/155-200/1300	200V	1.3	1.75	3.8m³/h	155m	1.25"	2m	<430V	≥1800W
④ 3SDH3.8/180-200/1500	200V	1.5	2	3.8m³/h	180m	1.25"	2m	<430V	≥2000W
⑤ 3SDH6/60-110/750	110V	0.75	1	6.0m³/h	60m	1.25"	2m	<430V	≥1000W
⑥ 3SDH6/85-150/1100	150V	1.1	1.5	6.0m³/h	85m	1.25"	2m	<430V	≥1500W
⑦ 3SDH6/125-200/1500	200V	1.5	2	6.0m³/h	125m	1.25"	2m	<430V	≥2000W
⑧ 3SDH7/46-110/750	110V	0.75	1	7.0m³/h	46m	1.25"/1.5"	2m	<430V	≥1000W
⑨ 3SDH8/62-150/1100	150V	1.1	1.5	8.0m³/h	62m	1.25"/1.5"	2m	<430V	≥1500W
⑩ 3SDH8/90-200/1500	200V	1.5	2	8.0m³/h	90m	1.25"/1.5"	2m	<430V	≥2000W



DC-HV

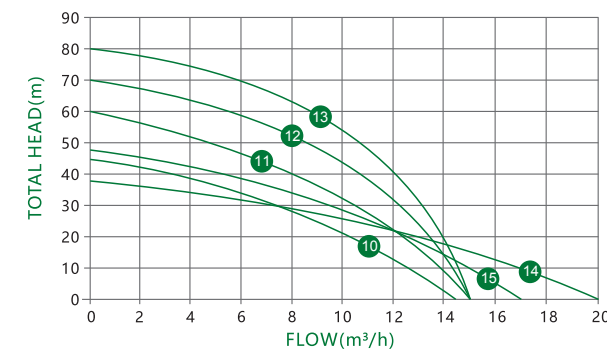
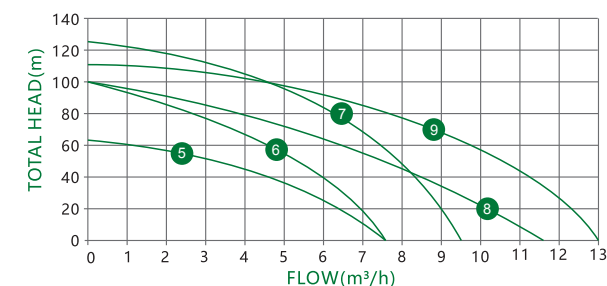
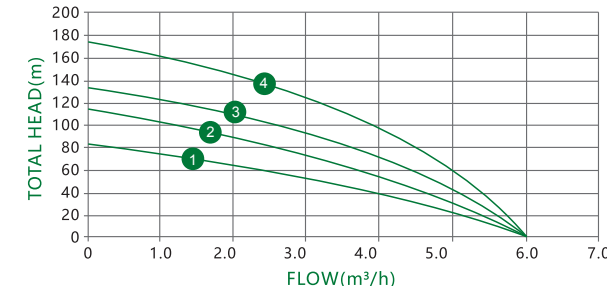
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APPLICATION FIELD

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PERFORMANCE CURVES

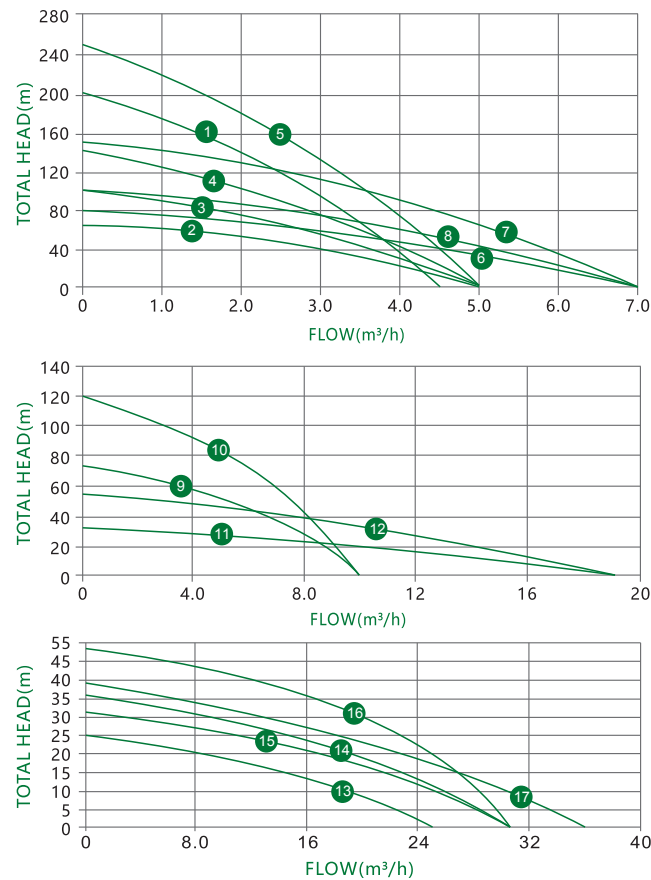


TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
① 4SDH6/84-150/1100	150V	1.1	1.5	6.0m³/h	84m	1.25"	2m	<430V	≥1500W
② 4SDH6/112-200/1300	200V	1.3	1.75	6.0m³/h	112m	1.25"	2m	<430V	≥1800W
③ 4SDH6/135-200/1500	200V	1.5	2	6.0m³/h	135m	1.25"	2m	<430V	≥2000W
④ 4SDH6/175-300/2200	300V	2.2	3	6.0m³/h	175m	1.25"	2m	<490V	≥3000W
⑤ 4SDH7.5/65-110/750	110V	0.75	1	7.5m³/h	65m	1.5"	2m	<430V	≥1000W
⑥ 4SDH7.5/100-150/1100	150V	1.1	1.5	7.5m³/h	100m	1.5"	2m	<430V	≥1500W
⑦ 4SDH9.5/125-300/2200	300V	2.2	3	9.5m³/h	125m	2"	2m	<430V	≥1000W
⑧ 4SDH11.5/100-200/1500	200V	1.5	2	11.5m³/h	100m	2"	2m	<430V	≥1800W
⑨ 4SDH13/110-300/2200	300V	2.2	3	13.0m³/h	110m	2"	2m	<490V	≥3000W
⑩ 4SDH14.5/45-110/750	110V	0.75	1	14.5m³/h	45m	2"	2m	<430V	≥1000W
⑪ 4SDH15/60-150/1100	150V	1.1	1.5	15.0m³/h	60m	2"	2m	<430V	≥1500W
⑫ 4SDH15/70-200/1500	200V	1.5	2	15.0m³/h	70m	2"	2m	<430V	≥2000W
⑬ 4SDH17/48-200/1500	200V	1.5	2	17.0m³/h	48m	2"	2m	<430V	≥2000W
⑭ 4SDH17/80-300/2200	300V	2.2	3	17.0m³/h	80m	2"	2m	<490V	≥3000W
⑮ 4SDH20/38-200/1500	200V	1.5	2	20.0m³/h	38m	2"	2m	<430V	≥2000W



PERFORMANCE CURVES



ADVANTAGE FOR SOLAR WATER PUMP

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- 2. Environmental protection, clean energy, can be powered by both solar panel and battery
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- 4. With MPPT function
- 5. Much longer life than the normal AC water pump.

APPLICATION FIELD

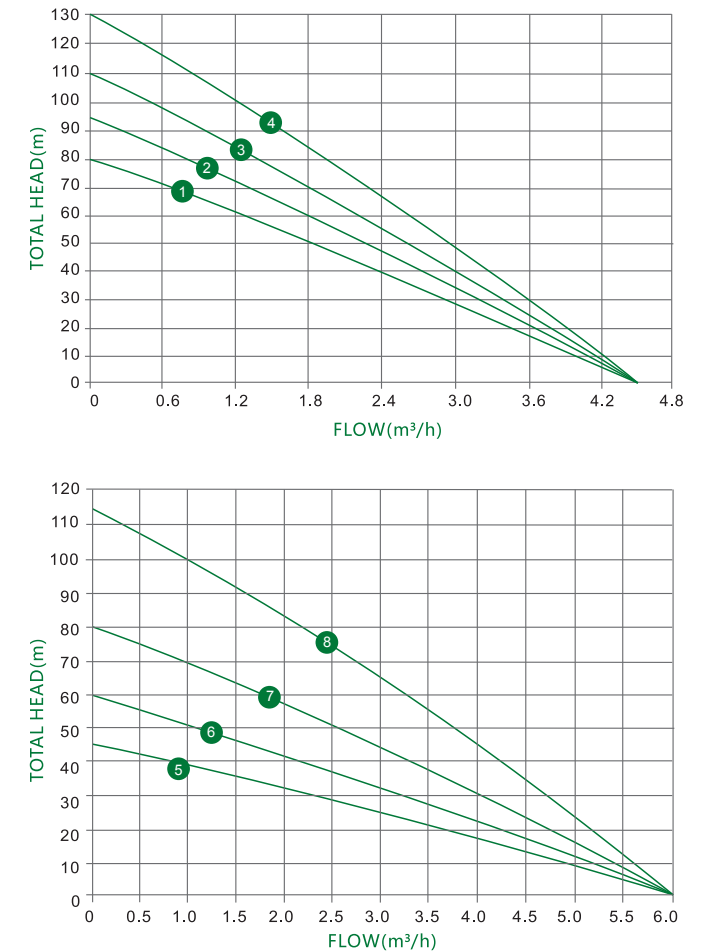
- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

ITEM	Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
		KW	HP					open voltage	power
① 4SPH4.5/203-200/1500	200V	1.5	2	4.5m³/h	203m	1.25"	2m	<430V	≥2000W
② 4SPH5/67-110/750	110V	0.75	1	5.0m³/h	67m	1.25"	2m	<430V	≥1000W
③ 4SPH5/101-150/1100	150V	1.1	1.5	5.0m³/h	101m	1.25"	2m	<430V	≥1500W
④ 4SPH5/146-200/1300	200V	1.3	1.75	5.0m³/h	146m	1.25"	2m	<430V	≥1800W
⑤ 4SPH5/255-300/2200	300V	2.2	3	5.0m³/h	255m	1.25"	2m	<490V	≥3000W
⑥ 4SPH7/80-200/1300	200V	1.3	1.75	7.0m³/h	80m	1.25"	2m	<430V	≥1800W
⑦ 4SPH7/100-200/1500	200V	1.5	2	7.0m³/h	100m	1.25"	2m	<430V	≥2000W
⑧ 4SPH7/150-300/2200	300V	2.2	3	7.0m³/h	150m	1.25"	2m	<490V	≥3000W
⑨ 4SPH9/72-200/1500	200V	1.5	2	9.0m³/h	72m	2"	2m	<430V	≥2000W
⑩ 4SPH9/120-300/2200	300V	2.2	3	9.0m³/h	120m	2"	2m	<490V	≥3000W
⑪ 4SPH19/34-200/1500	200V	1.5	2	19.0m³/h	34m	2"	2m	<430V	≥2000W
⑫ 4SPH19/57-300/2200	300V	2.2	3	19.0m³/h	57m	2"	2m	<490V	≥3000W
⑬ 4SPH25/25-200/1500	200V	1.5	2	25.0m³/h	25m	2"	2m	<430V	≥2000W
⑭ 4SPH30/36-300/2200	300V	2.2	3	30.0m³/h	36m	2"	2m	<490V	≥3000W
⑮ 4/6SPH30/31-200/1500	200V	1.5	2	30.0m³/h	31m	3"	2m	<430V	≥2000W
⑯ 4/6SPH30/52-300/2200	300V	2.2	3	30.0m³/h	52m	3"	2m	<490V	≥3000W
⑰ 4/6SPH36/38-300/2200	300V	2.2	3	36.0m³/h	38m	3"	2m	<490V	≥3000W



PERFORMANCE CURVES



ADVANTAGE FOR SOLAR WATER PUMP

- 1. With high efficiency permanent magnetic motor, efficiency improved 15%-30%
- 2. Environmental protection, clean energy, can be powered by both solar panel or AC electricity
- 3. Over-load protection, under-load protection, lock-rotor protection, thermal protection
- 4. With MPPT function
- 5. Much longer life than the normal water pump.

APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 3SP4.5/80-110/600AD	110V-240V	60V-430V	0.6	0.8	4.5m³/h	80m	1.25"	2m	<430V	≥750W
② 3SP4.5/95-110/750AD	110V-240V	60V-430V	0.75	1	4.5m³/h	95m	1.25"	2m	<430V	≥1000W
③ 3SP4.5/110-150/1100AD	110V-240V	60V-430V	1.1	1.5	4.5m³/h	110m	1.25"	2m	<430V	≥1500W
④ 3SP4.5/130-200/1500AD	110V-240V	60V-430V	1.5	2	4.5m³/h	130m	1.25"	2m	<430V	≥2000W
⑤ 3SP6/44-110/600AD	110V-240V	60V-430V	0.6	0.8	6.0m³/h	44m	1.25"	2m	<430V	≥750W
⑥ 3SP6/60-110/750AD	110V-240V	60V-430V	0.75	1	6.0m³/h	60m	1.25"	2m	<430V	≥1000W
⑦ 3SP6/85-150/1100AD	110V-240V	60V-430V	1.1	1.5	6.0m³/h	85m	1.25"	2m	<430V	≥1500W
⑧ 3SP6/115-200/1500AD	110V-240V	60V-430V	1.5	2	6.0m³/h	115m	1.25"	2m	<430V	≥2000W



ADVANTAGE FOR SOLAR WATER PUMP

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APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 3SD3.8/80-110/600AD	110V-240V	60V-430V	0.6	0.8	3.8m³/h	80m	1.25"	2m	<430V	≥750W
② 3SD3.8/95-100/750AD	110V-240V	60V-430V	0.75	1	3.8m³/h	95m	1.25"	2m	<430V	≥1000W
③ 3SD3.8/123-150/1100AD	110V-240V	60V-430V	1.1	1.5	3.8m³/h	123m	1.25"	2m	<430V	≥1500W
④ 3SD3.8/155-200/1300AD	110V-240V	60V-430V	1.3	1.75	3.8m³/h	155m	1.25"	2m	<430V	≥1800W
⑤ 3SD3.8/180-200/1500AD	110V-240V	60V-430V	1.5	2	3.8m³/h	180m	1.25"	2m	<430V	≥2000W
⑥ 3SD5.5/42-110/600AD	110V-240V	60V-430V	0.6	0.8	5.5m³/h	42m	1.25"	2m	<430V	≥750W
⑦ 3SD6/60-110/750AD	110V-240V	60V-430V	0.75	1	6.0m³/h	60m	1.25"	2m	<430V	≥1000W
⑧ 3SD6/85-150/1100AD	110V-240V	60V-430V	1.1	1.5	6.0m³/h	85m	1.25"	2m	<430V	≥1500W
⑨ 3SD6/125-200/1500AD	110V-240V	60V-430V	1.5	2	6.0m³/h	125m	1.25"	2m	<430V	≥2000W
⑩ 3SD7/46-110/750AD	110V-240V	60V-430V	0.75	1	7.0m³/h	46m	1.25"/1.5"	2m	<430V	≥1000W
⑪ 3SD8/62-150/1100AD	110V-240V	60V-430V	1.1	1.5	8.0m³/h	62m	1.25"/1.5"	2m	<430V	≥1500W
⑫ 3SD8/90-200/1500AD	110V-240V	60V-430V	1.5	2	8.0m³/h	90m	1.25"/1.5"	2m	<430V	≥2000W



ADVANTAGE FOR SOLAR WATER PUMP

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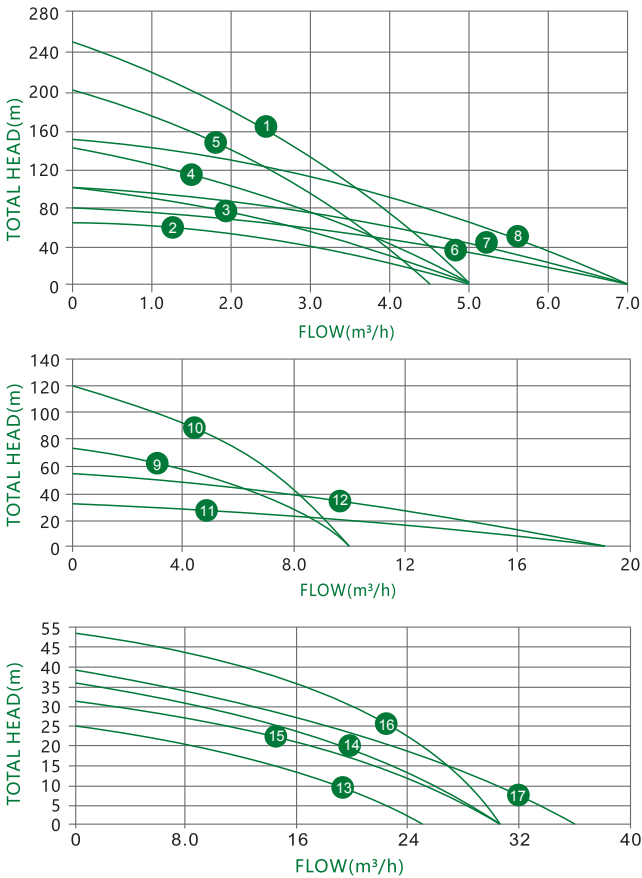
APPLICATION FIELD

- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

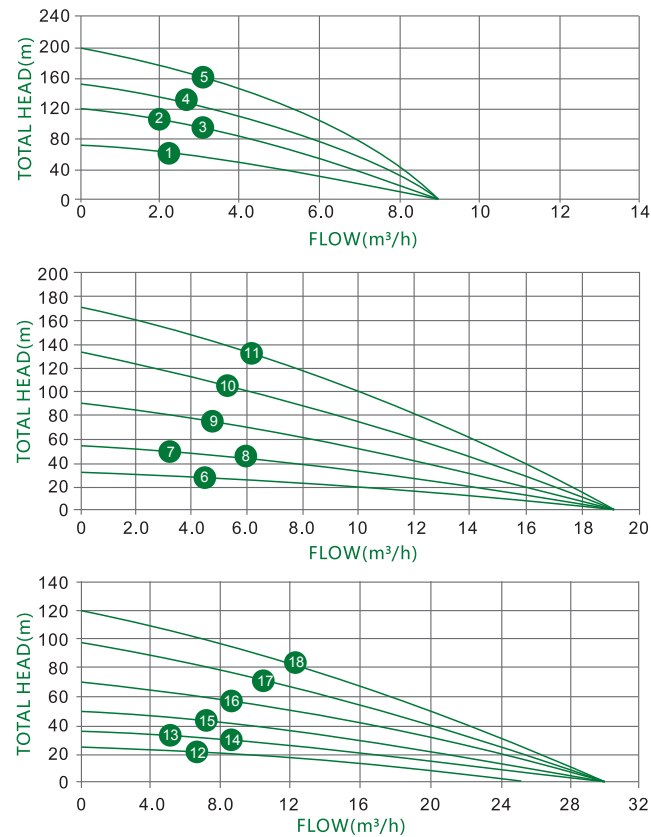
ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 4SP4.5/203-200/1500AD	110V-240V	60V-430V	1.5	2	4.5m³/h	203m	1.25"	2m	<430V	≥2000W
② 4SP5/67-110/750AD	110V-240V	60V-430V	0.75	1	5.0m³/h	67m	1.25"	2m	<430V	≥1000W
③ 4SP5/101-150/1100AD	110V-240V	60V-430V	1.1	1.5	5.0m³/h	101m	1.25"	2m	<430V	≥1500W
④ 4SP5/146-200/1300AD	110V-240V	60V-430V	1.3	1.75	5.0m³/h	146m	1.25"	2m	<430V	≥1800W
⑤ 4SP5/255-300/2200AD	180V-240V	60V-430V	2.2	3	5.0m³/h	255m	1.25"	2m	<430V	≥3000W
⑥ 4SP7/80-200/1300AD	110V-240V	60V-430V	1.3	1.75	7.0m³/h	80m	1.25"	2m	<430V	≥1800W
⑦ 4SP7/100-200/1500AD	110V-240V	60V-430V	1.5	2	7.0m³/h	100m	1.25"	2m	<430V	≥2000W
⑧ 4SP7/150-300/2200AD	180V-240V	60V-430V	2.2	3	7.0m³/h	150m	1.25"	2m	<430V	≥3000W
⑨ 4SP9/72-200/1500AD	110V-240V	60V-430V	1.5	2	9.0m³/h	72m	2"	2m	<430V	≥2000W
⑩ 4SP9/120-300/2200AD	180V-240V	60V-430V	2.2	3	9.0m³/h	120m	2"	2m	<430V	≥3000W
⑪ 4SP19/34-200/1500AD	110V-240V	60V-430V	1.5	2	19.0m³/h	34m	2"	2m	<430V	≥2000W
⑫ 4SP19/57-300/2200AD	180V-240V	60V-430V	2.2	3	19.0m³/h	57m	2"	2m	<430V	≥3000W
⑬ 4SP25/25-200/1500AD	110V-240V	60V-430V	1.5	2	25.0m³/h	25m	2"	2m	<430V	≥2000W
⑭ 4SP30/36-300/2200AD	180V-240V	60V-430V	2.2	3	30.0m³/h	36m	2"	2m	<430V	≥3000W
⑮ 4/6SP30/31 -200/1500AD	110V-240V	60V-430V	1.5	2	30.0m³/h	31m	3"	2m	<430V	≥2000W
⑯ 4/6SP30/52-300/2200AD	180V-240V	60V-430V	2.2	3	30.0m³/h	52m	3"	2m	<430V	≥3000W
⑰ 4/6SP36/38-300/2200AD	180V-240V	60V-430V	2.2	3	36.0m³/h	38m	3"	2m	<430V	≥3000W

PERFORMANCECURVES





PERFORMANCE CURVES



ADVANTAGE FOR SOLAR WATER PUMP

- 1. With high efficiency permanent magnetic motor, efficiency improved 15%-30%
- 2.Environmental protection, clean energy, can be powered by both solar panel or AC electricity
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- 4.With MPPT function
- 5.Much longer life than the normal AC water pump.

APPLICATION FIELD

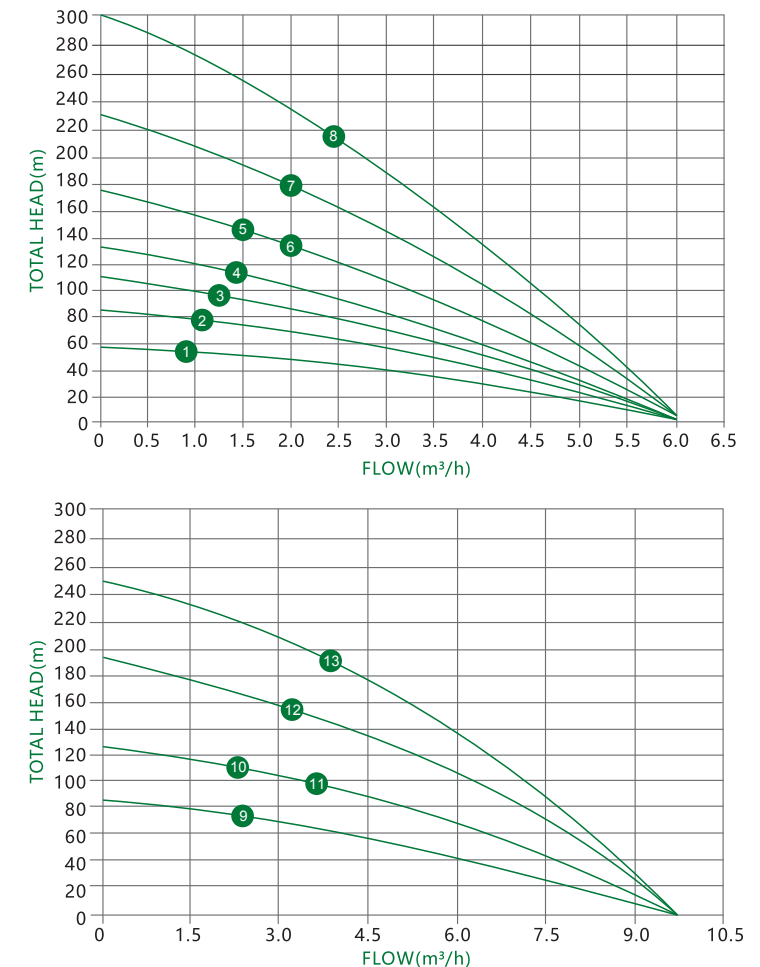
- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use

TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 4SPH9/72-220/1500AD	150V-240V	300V-450V	1.5	2	9.0m³/h	72m	2"	2m	<450V	≥2000W
② 4SPH9/120-220/2200AD	150V-240V	300V-450V	2.2	3	9.0m³/h	120m	2"	2m	<450V	≥3000W
③ 4SPH9/120-220/2200AD	350V-460V	480V-800V	2.2	3	9.0m³/h	120m	2"	2m	<800V	≥3000W
④ 4SPH9/155-380/3000AD	350V-460V	480V-800V	3	4	9.0m³/h	155m	2"	2m	<800V	≥4000W
⑤ 4SPH9/200-380/4000AD	350V-460V	480V-800V	4	5.5	9.0m³/h	200m	2"	2m	<800V	≥5000W
⑥ 4SPH19/34-220/1500AD	150V-240V	300V-450V	1.5	2	19.0m³/h	34m	2"	2m	<450V	≥2000W
⑦ 4SPH19/57-220/2200AD	150V-240V	300V-450V	2.2	3	19.0m³/h	57m	2"	2m	<450V	≥3000W
⑧ 4SPH19/57-380/2200AD	350V-460V	480V-800V	2.2	3	19.0m³/h	57m	2"	2m	<800V	≥3000W
⑨ 4SPH19/90-380/3000AD	350V-460V	480V-800V	3	4	19.0m³/h	90m	2"	2m	<800V	≥4000W
⑩ 4SPH19/135-380/4000AD	350V-460V	480V-800V	4	5.5	19.0m³/h	135m	2"	2m	<800V	≥5000W
⑪ 4SPH19/170-380/5500AD	350V-460V	480V-800V	5.5	7.5	19.0m³/h	170m	2"	2m	<800V	≥6000W
⑫ 4SPH25/25-220/1500AD	150V-240V	300V-450V	1.5	2	25.0m³/h	25m	2"	2m	<450V	≥2000W
⑬ 4SPH30/36-220/2200AD	150V-240V	300V-450V	2.2	3	30.0m³/h	36m	2"	2m	<450V	≥3000W
⑭ 4SPH30/36-380/2200AD	350V-460V	480V-800V	2.2	3	30.0m³/h	36m	2"	2m	<800V	≥3000W
⑮ 4SPH30/50-380/3000AD	350V-460V	480V-800V	3	4	30.0m³/h	50m	2"	2m	<800V	≥4000W
⑯ 4SPH30/72-380/4000AD	350V-460V	480V-800V	4	5.5	30.0m³/h	72m	2"	2m	<800V	≥5000W
⑰ 4SPH30/96-380/5500AD	350V-460V	480V-800V	5.5	7.5	30.0m³/h	96m	2"	2m	<800V	≥6000W
⑱ 4SPH30/120-380/7500AD	350V-460V	480V-800V	7.5	10	30.0m³/h	120m	2"	2m	<800V	≥8500W



PERFORMANCE CURVES



ADVANTAGE FOR SOLAR WATER PUMP

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APPLICATION FIELD

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TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 4SDH6/56-220/750AD	150V-240V	300V-450V	0.75	1	6.0m³/h	56m	1.25"	2m	<450V	≥1800W
② 4SDH6/84-220/1100AD	150V-240V	300V-450V	1.1	1.5	6.0m³/h	84m	1.25"	2m	<450V	≥1800W
③ 4SDH6/112-220/1300AD	150V-240V	300V-450V	1.3	1.75	6.0m³/h	112m	1.25"	2m	<450V	≥1800W
④ 4SDH6/135-220/1500AD	150V-240V	300V-450V	1.5	2	6.0m³/h	135m	1.25"	2m	<450V	≥2000W
⑤ 4SDH6/175-220/2200AD	150V-240V	300V-450V	2.2	3	6.0m³/h	175m	1.25"	2m	<450V	≥3000W
⑥ 4SDH6/175-380/2200AD	350V-460V	480V-800V	2.2	3	6.0m³/h	175m	1.25"	2m	<800V	≥3000W
⑦ 4SDH6/230-380/3000AD	350V-460V	480V-800V	3	4	6.0m³/h	230m	1.25"	2m	<800V	≥4000W
⑧ 4SDH6/300-380/4000AD	350V-460V	480V-800V	4	5.5	6.0m³/h	300m	1.25"	2m	<800V	≥5000W
⑨ 4SDH9.5/85-220/1500AD	150V-240V	300V-450V	1.5	2	9.5m³/h	85m	2"	2m	<450V	≥2000W
⑩ 4SDH9.5/125-220/2200AD	150V-240V	300V-450V	2.2	3	9.5m³/h	125m	2"	2m	<450V	≥3000W
⑪ 4SDH9.5/125-380/2200AD	350V-460V	480V-800V	2.2	3	9.5m³/h	125m	2"	2m	<800V	≥3000W
⑫ 4SDH9.5/195-380/3000AD	350V-460V	480V-800V	3	4	9.5m³/h	195m	2"	2m	<800V	≥4000W
⑬ 4SDH9.5/250-380/4000AD	350V-460V	480V-800V	4	5.5	9.5m³/h	250m	2"	2m	<800V	≥5000W

ADVANTAGE FOR SOLAR WATER PUMP

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APPLICATION FIELD

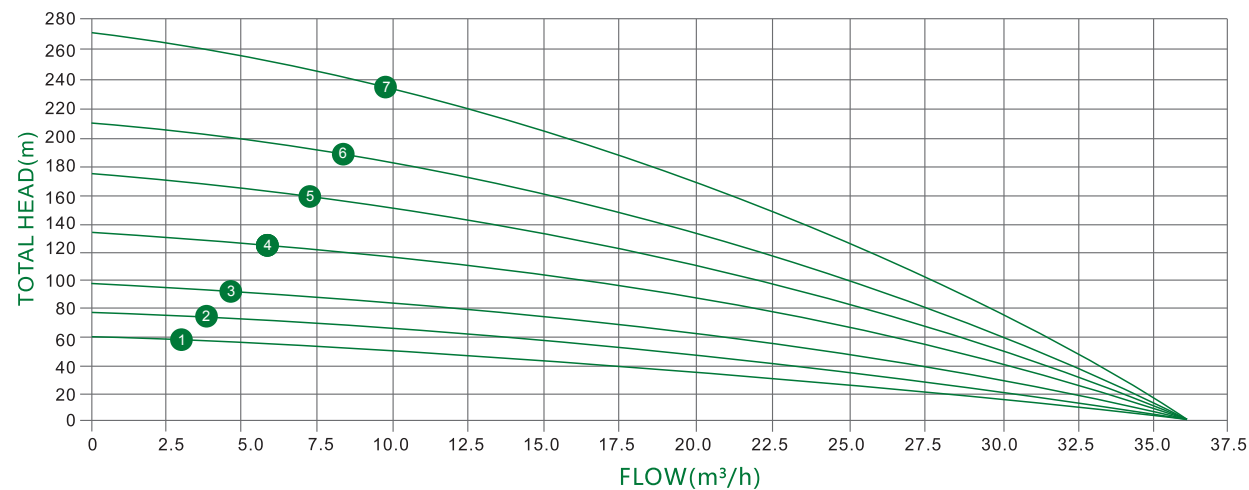
- These water pumps are used in irrigation of agriculture, and also widely used for drinking water and living water use



AC/DC controller

AC/DC controller

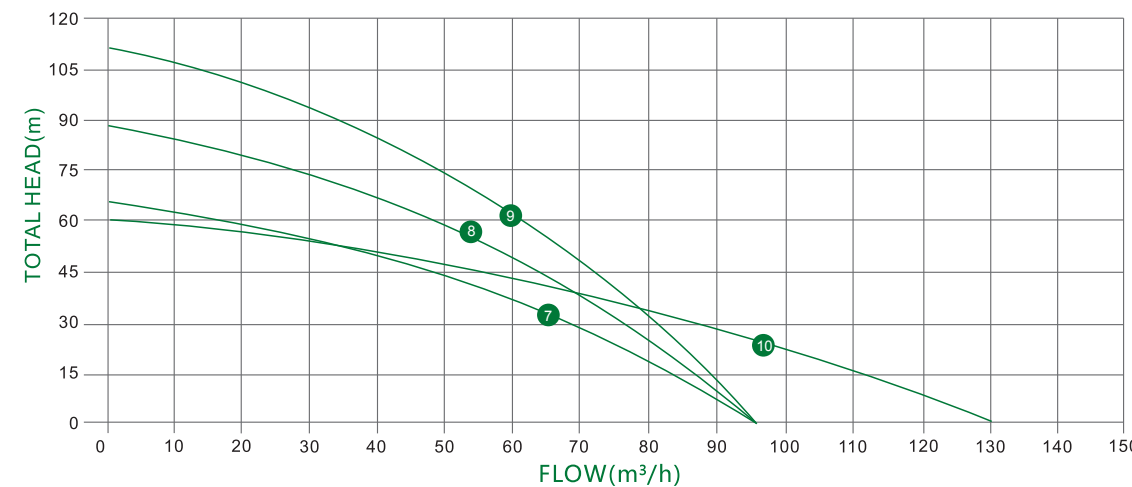
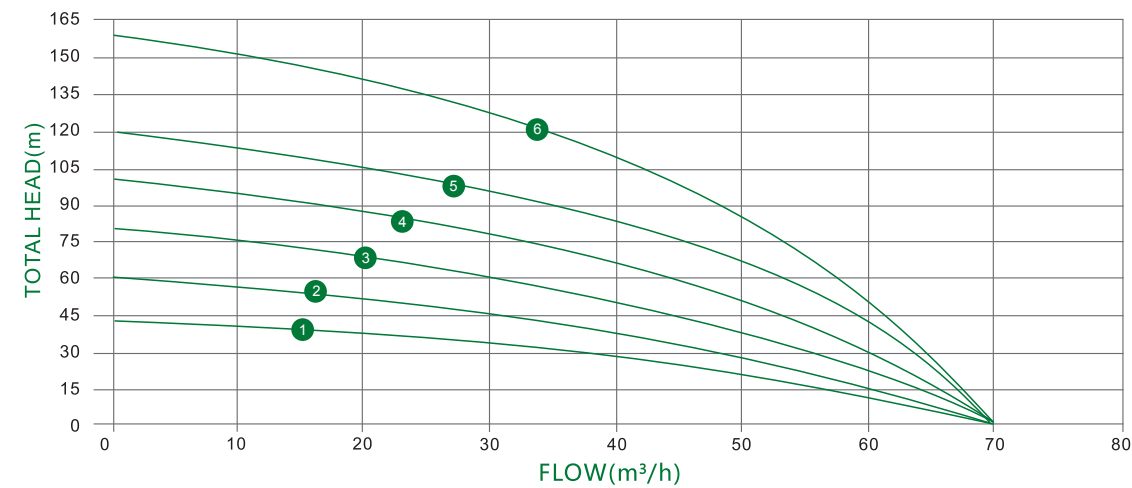
PERFORMANCE CURVES



TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 6SPH36/60-380/3000AD	350V-460V	480V-800V	3	4	36m³/h	60m	3"	2m	<800V	≥4000w
② 6SPH36/77-380/4000AD	350V-460V	480V-800V	4	5.5	36m³/h	77m	3"	2m	<800V	≥5000w
③ 6SPH36/98-380/5500AD	350V-460V	480V-800V	5.5	7.5	36m³/h	98m	3"	2m	<800V	≥6000W
④ 6SPH36/135-380/7500AD	350V-460V	480V-800V	7.5	10	36m³/h	135m	3"	2m	<800V	≥8500w
⑤ 6SPH36/175-380/9200AD	350V-460V	480V-800V	9.2	12.5	36m³/h	175m	3"	2m	<800V	≥10000w
⑥ 6SPH6/210-380/11000AD	350V-460V	480V-800V	11	15	36m³/h	210m	3"	2m	<800V	≥15000w
⑦ 6SPH36/270-380/15000AD	350V-460V	480V-800V	15	20	36m³/h	270m	3"	2m	<800V	≥20000w

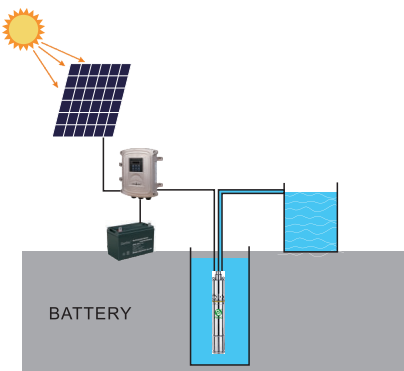
PERFORMANCE CURVES



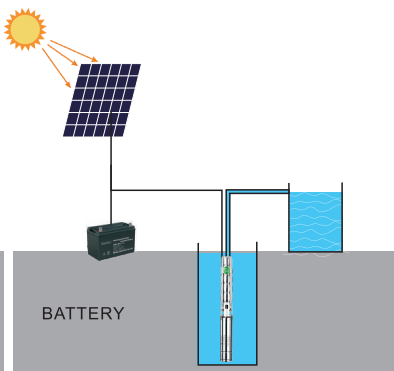
TECHNICAL DATA

ITEM	AC Voltage	DC Voltage	P ₂		Max Flow	Max Head	Outlet	Cable	Solar Panel	
			KW	HP					open voltage	power
① 6SPH70/40-380/4000AD	350V-460V	480V-800V	4	5.5	70m³/h	40m	4"	2m	<800V	≥5000w
② 6SPH70/60-380/5500AD	350V-460V	480V-800V	5.5	7.5	70m³/h	60m	4"	2m	<800V	≥6000W
③ 6SPH70/80-380/7500AD	350V-460V	480V-800V	7.5	10	70m³/h	80m	4"	2m	<800V	≥8500w
④ 6SPH70/100-380/9200AD	350V-460V	480V-800V	9.2	12.5	70m³/h	100m	4"	2m	<800V	≥10000w
⑤ 6SPH70/120-380/11000AD	350V-460V	480V-800V	11	15	70m³/h	120m	4"	2m	<800V	≥15000w
⑥ 6SPH70/160-380/15000AD	350V-460V	480V-800V	15	20	70m³/h	160m	4"	2m	<800V	≥20000w
⑦ 6SPH95/66-380/7500AD	350V-460V	480V-800V	7.5	10	95m³/h	66m	4"	2m	<800V	≥8500w
⑧ 6SPH95/88-380/11000AD	350V-460V	480V-800V	11	15	95m³/h	88m	4"	2m	<800V	≥15000w
⑨ 6SPH95/110-380/15000AD	350V-460V	480V-800V	15	20	95m³/h	110m	4"	2m	<800V	≥20000w
⑩ 6SPH130/60-380/15000AD	350V-460V	480V-800V	15	20	130m³/h	60m	4"	2m	<800V	≥20000w

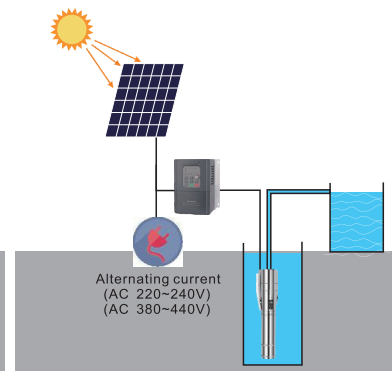
DC EXTERNAL CONTROLLER TYPE



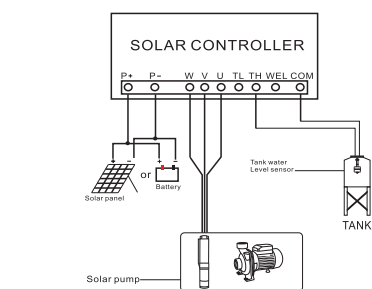
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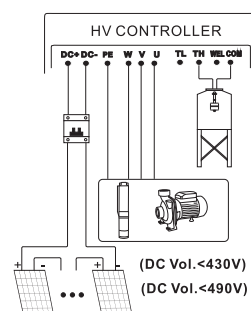
AC/DC EXTERNAL CONTROLLER TYPE



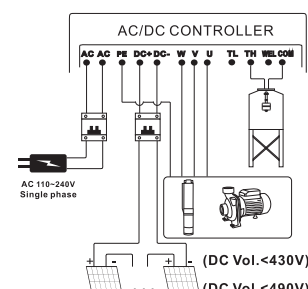
SYSTEM INSTALLATION DRAWING



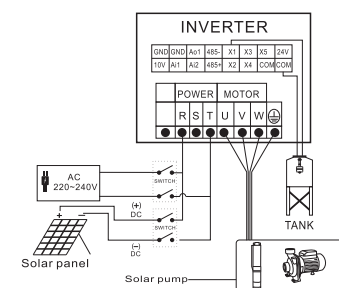
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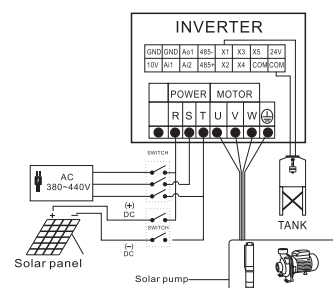
SOLARPANEL



SOLARPANEL



AC/DC:220/300V



AC/DC:380/550V

WORKING ENVIRONMENT AND ELECTRICAL PROPERTY

Controller and Pump Matching Method					
Controller Model	Adaptable Pump	Max.Input Current (A)	Max.Open Voltage (V)	MPPT Voltage Range (V)	Working Temperature (°C)
F-24	Rated 24V Pump	15	<54V	30-48	-15-60
F-36	Rated 36V Pump	15	<54V	30-58	-15-60
F-48	Rated 48V Pump	15	<110V	60-90	-15-60
F-72	Rated 72V Pump	15	<170V	90-120	-15-60
F-110	Rated 110V Pump	15	<210V	110-150	-15-60
F-220	Rated 220V Pump	15	<450V	300-400	-15-60
F-380	Rated 380V Pump	15	<800V	480-750	-15-60

Control box Type	MODEL	SOLAR PANEL PARAMETER								control box parameter	
		340W		375W		450W		520W			
		Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage
		34 20V	41 1V	34 20V	41 50V	41V	49V	41 02V	48 94V		
DC Type	120W-24V 180W-24V 210W-24V 210W-36V	1 pcs		1 pcs		1 pcs		1 pcs		18V-54V	<54V
	280W-24V 300W-24V	1 pcs		1 pcs		1 pcs		1 pcs		18V-54V	<54V
	400W-48V	2 pcs in series		2 pcs in series		2 pcs in series		2 pcs in series		30V-110V	<110V
	500W-48V 550W-48V	2 pcs in series		2 pcs in series		2 pcs in series		2 pcs in series		30V-110V	<110V
	600W-48V	total 4pcs, 2pcs in series and in 2 parallels		2 pcs in series		2 pcs in series		2 pcs in series		30V-110V	<110V
	600W-72V	3 pcs in series		2 pcs in series		2 pcs in series		2 pcs in series		50V-170V	<170V
	750W-72V	3 pcs in series		3 pcs in series		3 pcs in series		2 pcs in series		50V-170V	<170V
	900W-72V	3 pcs in series		3 pcs in series		3 pcs in series		3 pcs in series		50V-170V	<170V
	1100W-110V	4 pcs in series		4 pcs in series		4 pcs in series		3 pcs in series		60V-210V	<210V
	1200W-110V 1300W-110V	total 8pcs, 4pcs in series and in 2 parallels		total 8pcs, 4pcs in series and in 2 parallels		4 pcs in series		4 pcs in series		60V-210V	<210V
	1500W-110V	total 8pcs, 4pcs in series and in 2 parallels		total 8pcs, 4pcs in series and in 2 parallels		total 8pcs, 4pcs in series and in 2 parallels		4 pcs in series		60V-210V	<210V

Control box Type	MODEL	SOLAR PANEL PARAMETER								control box parameter	
		340W		375W		450W		520W			
		Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage
		34.20V	41.1V	34.20V	41.50V	41V	49V	41.02V	48.94V		
HIGH VOLTAGE &AV/DC Type	750W-110V	3or4 pcs in series		3or4 pcs in series		3 pcs in series		3 pcs in series		110V-130V	<430V
	1100W-150V	5or6 pcs in series		5or6 pcs in series		4or5 pcs in series		4or5 pcs in series		150V-170V	<430V
	1500W-200V	6or7 pcs in serie		6or7 pcs in serie		5or6 pcs in series		5or6 pcs in series		200V-220V	<430V
	2200W-300V	9 pcs in series		8or9 pcs in series		7or8 pcs in serie		7or8 pcs in serie		300V	<430V

Control box Type	MODEL	SOLAR PANEL PARAMETER								control box parameter	
		340W		375W		450W		520W			
		Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage	Working voltage	Open voltage		
		34.20V	41.1V	34.20V	41.50V	41V	49V	41.02V	48.94V		
AC/DC (INVERTER TYPE)	750W-220V	7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		300V-400V	<450V
	1100W-220V	7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		300V-400V	<450V
	1500W-220V	7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		7or8 pcs in serie		300V-400V	<450V
	2200W-220V	8or9 pcs in series		8or9 pcs in series		7 pcs in series		7 pcs in series		300V-400V	<450V
	2200W-380V	14 pcs in series		14 pcs in series		12 pcs in series		12 pcs in series		480V-530V	<800V
	3000W-380V	15 pcs in series		15 pcs in series		12 pcs in series		12 pcs in series		480V-530V	<800V
	4000W-380V	15or16 pcs in series		15 pcs in series		12 pcs in series		12 pcs in series		480V-530V	<800V
	5500W-380V	total 28pcs, 14pcs in series and in 2 parallels		total 28pcs, 14pcs in series and in 2 parallels		total 24pcs, 12pcs in series and in 2 parallels		total 24pcs, 12pcs in series and in 2 parallels		480V-530V	<800V
	7500W-380V	total 30pcs, 15pcs in series and in 2 parallels		total 30pcs, 15pcs in series and in 2 parallels		total 24pcs, 12pcs in series and in 2 parallels		total 24pcs, 12pcs in series and in 2 parallels		480V-530V	<800V
	9200W-380V	total 42pcs, 14pcs in series and in 3 parallels		total 42pcs, 14pcs in series and in 3 parallels		total 26pcs, 13pcs in series and in 2 parallels		total 26pcs, 13pcs in series and in 2 parallels		480V-530V	<800V
	11KW-380V	total 48pcs, 16pcs in series and in 3 parallels		total 48pcs, 16pcs in series and in 3 parallels		total 36pcs, 12pcs in series and in 3 parallels		total 30pcs, 15pcs in series and in 2 parallels		480V-530V	<800V
	15KW-380V	total 60pcs, 15pcs in series and in 4 parallels		total 60pcs, 15pcs in series and in 4 parallels		total 48pcs, 12pcs in series and in 4 parallels		total 48pcs, 12pcs in series and in 4 parallels		480V-530V	<800V

